

COMPOSITIONS AND METHODS FOR ENHANCING DRUG DELIVERY ACROSS BIOLOGICAL MEMBRANES AND TISSUES

ABSTRACT OF THE DISCLOSURE

This invention provides compositions and methods for enhancing delivery of drugs and other agents across a biological barrier, including epithelial tissues such as the skin, gastrointestinal tract, pulmonary epithelium, and the like. The compositions and methods are also useful for delivery across endothelial tissues, including the blood brain barrier. The compositions and methods employ a delivery enhancing transporter that has sufficient guanidino or amidino sidechain moieties to enhance delivery of a compound across one or more layers of the tissue, compared to the non-conjugated compound. The delivery-enhancing polymers include, for example, poly-arginine molecules that are preferably between about 6 and 50 residues in length.